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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,501

09/21/2005

Paul M. Fowler

65856-0075

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10291 7590 06/01/2007
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EXAMINER

LEWIS, TISHA D

ART UNIT

PAPER NUMBER

3681

MAIL DATE

DELIVERY MODE

06/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/550,501

Applicant(s)

FOWLER ET AL.

Examiner

TISHA D. LEWIS

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-16,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 8 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

The following is a first action on the merits of application serial no. 10/550,501 filed on September 21, 2005.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement filed on September 21, 2005 has been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-6, 10, 11, 13-15 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Wheeler et al (6,445,992). Wheeler et al discloses a clutch control determining a throttle operating parameter value (THL), comparing the value to a threshold value (first reference value), setting an operating mode of the clutch based on the throttle comparison (command clutch to engage), the parameter value corresponds to a throttle position, determining a vehicle operating condition (vehicle speed), comparing the condition to a predetermined limit (second reference value) and setting the operating mode based on the comparison (Figure 4), an electronic control unit (34)

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receives signals for the throttle parameter and controls the operating mode of the clutch, determining a desired fueling rate of the engine (a fuel rate is controlled by the throttle position which has a predetermined value (first reference value) and setting the engagement rate of the clutch based on the desired rate (engagement will have the same torque transfer capacities as the drive torque).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wheeler et al in view of Takatori et al (6,743,150). Wheeler et al discloses controlling engagement of the clutch, but not at an aggressive rate when the throttle is increasing.

Takatori et al discloses controlling a lock up clutch at a rapid increase slip when a throttle parameter value increases (TVO1, TVO2, etc.).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Wheeler et al with an aggressive clutch control in view of Takatori et al to provide better fuel economy performance.

Claims 7, 9, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wheeler et al in view of Jarvis (5,072,815). Wheeler et al discloses controlling clutch engagement, but not at a least aggressive rate when the throttle parameter is equal to or less than a threshold.

Jarvis (Figure 3) discloses controlling a clutch engagement wherein a clutch is at a least aggressive rate (124) when the throttle parameter is less than or substantially equal to a first threshold value (between T6 and T7, also is no throttle).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Wheeler et al with a clutch engagement control in view of Jarvis to control shift shock when the engine speed is high.

Allowable Subject Matter

Claims 8 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


-Kanno et al 5,766,110, Eich et al 6,850,829 and Kono et al 5,803,868. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 571-272-7093. The examiner can normally be reached on M-F 7:30 AM TO 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tdl
May 23, 2007


TISHA LEWIS
PRIMARY EXAMINER
AU 3681 5/23/07